

REMARKS

Claims 1-13 are pending. Claims 7 and 9 have been withdrawn from consideration by the Examiner for being drawn to a non-elected species. Applicants respectfully submit that no new matter is presented herein.

Claim Rejection -- 35 U.S.C. §103

Claims 1-6, 8, 10-11 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,934,397 to Schaper in view of U.S. Patent No. 3,575,621 to Volland et al. (Volland). Claim 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over Schaper in view of Volland, as applied to Claim 11 above, and further in view of U.S. Patent No. 5,289,890 to Toyoda et al. (Toyoda). Applicants respectfully traverse the rejections.

Claim 1 recites a hybrid vehicle including an engine for driving main driving wheels; and a plurality of motors for driving sub driving wheels, ***wherein a speed reduction member is disposed between a sub motor and a main motor***, and wherein at least one motor is selected from the plurality of motors to drive the sub driving wheels according to a driving force required by the vehicle.

The Office Action admits Schaper fails to teach or suggest a speed reduction member.

To remedy or otherwise overcome the admitted deficiency of Schaper, the Office Action states Volland teaches, in Figure 3, a driving means having a structure, which can be used on a vehicle, comprising motors (12, 14) having a speed reduction gear (16), which is connected to the motor. The Office Action then asserts that it would have been obvious to one of ordinary skill in the art to modify the hybrid vehicle taught by

Schaper with the motors having the speed reduction gear (16) as taught by Voland for the purpose of reducing the speed of the motors.

It is well established in U.S. patent law that in order to establish *prima facie* obviousness, each and every feature recited by a rejected claim must be taught or suggest by the applied art of record. See M.P.E.P. § 2143.03. As explained above, the Office Action admits Schaper fails to teach or suggest a speed reduction member. Therefore, Applicants respectfully submit that it is not possible for Schaper to teach or suggest a speed reduction member disposed between a sub motor and a main motor.

Regarding Voland, Applicants agree with the Office Action that Voland clearly teaches a speed reduction gear (16), however, Applicants respectfully point out that not only does Voland specifically teach a speed reduction gear (16) between the motor (12) and the output (20), but Voland also teaches a speed reduction gear (19) between the motor (14) and the output (20). As such, rather than teaching a speed reduction gear disposed between a sub motor and a main motor, Voland actually teaches two motors (12 and 14), wherein each motor (12 and 14) has its own speed reduction gear (16 and 18) disposed between the corresponding motor (12 or 14) and a common output (20). For Voland to teach that which is admitted to be missing from Schaper, there would need to be a single speed reduction gear disposed between both motors (12 and 14). That is not the case with Voland, which clearly and plainly teaches two motor drive means (12 and 14), wherein each motor has its own speed reduction gear (16 and 18) that connects its corresponding motor to a common output (20). As such, Applicants respectfully submit that Voland clearly and plainly does not teach that which is asserted by the Office Action and definitely does not teach or suggest a speed reduction gear

disposed between both motor (12 and 14), especially when each motor (12 and 14) has its own speed reduction gear and is not in series or otherwise connected to or with the other motor.

Furthermore, Applicants take extreme exception with the assertion that Voland somehow teaches a drive means having a structure that can be used on a vehicle including motors when Voland teaches driving means for use with appliances, e.g., a remote control for a television, washers, dryers. Applicants respectfully submit that the teachings of Voland are not within the field of endeavor of the claimed invention, and is not reasonably pertinent to the particular problem with which the Applicants were concerned (that is, enabling an increase in the driving force of sub driving wheels of a hybrid motor vehicle while suppressing to a minimum level any increase in size of the motor for driving the sub driving wheels) especially since the Office Action has not shown that a person of ordinary skill in the art, seeking to solve a problem of a hybrid motor vehicle would reasonably be expected or motivated to look to drive means for appliance control means. Further, Applicants respectfully submit that a hybrid motor vehicle and a drive means for an appliance control means not only do not perform the same function, but they also do not have the same structure and are not remotely similar to or classified in a common or similar field of endeavor. See M.P.E.P. §2141.01(a) IV.

Toyoda is cited for teaching a drive unit having an electromagnetic clutch. Applicants respectfully submit Toyoda fails to overcome or otherwise address the deficiencies in Schaper and Voland.

As such, Applicants respectfully submit that Schaper, Volland and Toyoda, alone or in any combination thereof, fails to teach or suggest each and every feature recited by Claim 1. Therefore, the Office Action has not established prima facie obviousness of Claim 1, and as such, Applicants respectfully submit that Claim 1 should be deemed allowable.

Claims 2-6, 8 and 10-13 depend from Claim 1. It is respectfully submitted that these dependent claims be deemed allowable for the same reasons Claim 1 is allowable, as well as for the additional subject matter recited therein.

Applicants respectfully request withdrawal of the rejections.

Claims 1-6, 8, 10-11 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,934,397 to Schaper in view of U.S. Patent No. 6,349,782 to Sekiya et al. (Sekiya). Applicants respectfully traverse the rejection.

Claim 1 recites a hybrid vehicle including an engine for driving main driving wheels; and a plurality of motors for driving sub driving wheels, ***wherein a speed reduction member is disposed between a sub motor and a main motor***, and wherein at least one motor is selected from the plurality of motors to drive the sub driving wheels according to a driving force required by the vehicle.

The Office Action admits Schaper fails to teach or suggest a speed reduction member.

To remedy or otherwise overcome the admitted deficiency of Schaper, the Office Action states Sekiya teaches, in Figures 2-3, a driving means having a structure, which can be used on a vehicle comprising motors (M_R , M_L) having a speed reduction gear (D), which is connected to a motor. The Office Action then asserts that it would have

been obvious to one of ordinary skill in the art to modify the hybrid vehicle taught by Schaper with the motors having the speed reduction gear (D) as taught by Sekiya for the purpose of reducing the speed of the motors.

It is well established in U.S. patent law that in order to establish *prima facie* obviousness, each and every feature recited by a rejected claim must be taught or suggest by the applied art of record. See M.P.E.P. § 2143.03. As explained above, the Office Action admits Schaper fails to teach or suggest a speed reduction member. Therefore, Applicants respectfully submit that it is not possible for Schaper to teach or suggest a speed reduction member disposed between a sub motor and a main motor.

Regarding Sekiya, Applicants respectfully disagree with the assertion made by the Office Action as to what is taught by Sekiya.

In particular, Applicants respectfully submit reference character (D) does not identify a speed reduction gear as asserted by the Office Action. Rather, reference character (D) identifies a rear wheel driving device (see Sekiya) and not a speed reduction gear.

Furthermore, Applicants note Sekiya discloses a vehicle (V) having an engine (E) wherein the driving force of the engine (E) is transferred to the left and front wheels W_{FL} and W_{FR} via a transmission (1), a differential (2) and left and right drive shafts 3_L , 3_R .

Moreover, Applicants respectfully submit that the rear wheel driving device (D) is not disposed between a sub motor and the main motor (e.g., the engine (E)). Rather, as clearly and plainly stated by Sekiya, the rear wheel driving device (D) is powered by the direct current motors M_L and M_R , wherein the driving forces of these motors M_L , M_R

are transferred, respectively, to the left and right wheels W_{RL} , W_{RR} via the rear wheel driving device (D) and left and right drive shafts 4_L , 4_R .

Applicants respectfully submit that at no point does Sekiya appear to teach or suggest either one of the direct current motors M_L or M_R functions as a main motor while the other functions as a sub motor.

Applicants further respectfully submit that at no point does Sekiya appear to teach or suggest either one of the direct current motors M_L or M_R functions as a sub motor wherein the rear wheel driving device (D) would be disposed between the sub motor (M_L or M_R) and a main motor (e.g., the engine (E)).

In view of the clear teachings of Sekiya, Applicants respectfully submit that one of ordinary skill in the art would not think or consider Sekiya teaches the rear wheel driving device (D) is a speed reduction member that is disposed between a sub motor and a main motor, especially when the rear wheel driving device (D) is disposed between two direct current motors M_L , M_R , that appear to be of equal strength or power and because the rear wheel driving device (D) is not disposed between a sub motor and a main motor. Claim 1 recites the speed reduction member is disposed between a sub motor and a main motor, a feature or characteristic that is not taught or suggested by Sekiya. That is, the speed reduction members of Sekiya are not provided between the motor M_L and the motor M_R . Rather, the speed reduction members taught by Sekiya are provided between the motor M_L and the rear wheel W_{RL} and between the motor M_R and the rear wheel W_{RR} , respectively.

As such, Applicants respectfully submit that Schaper and Sekiya, alone or in any combination thereof, fail to teach or suggest each and every feature recited by Claim 1. Therefore, the Office Action has not established *prima facie* obviousness of Claim 1, and as such, Applicants respectfully submit that Claim 1 should be deemed allowable.

Claims 2-6, 8, 10-11 and 13 depend from Claim 1. It is respectfully submitted that these dependent claims be deemed allowable for the same reasons Claim 1 is allowable, as well as for the additional subject matter recited therein.

Applicants respectfully request withdrawal of the rejection.

Request for Rejoinder

As noted in the Response to Restriction Requirement filed on April 22, 2005, Applicants submit Claim 1 is a generic claim. Upon the allowance of generic Claim 1, Applicants respectfully request reconsideration and rejoinder of non-elected Claims 7 and 9 as provided by 37 C.F.R. §1.141.

Conclusion

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, rejoinder of Claims 7 and 9, allowance of Claims 1-13, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 107355-00087.**

Respectfully submitted,



Murat Ozgu
Attorney for Applicants
Registration No. 44,275

Customer No. 004372

ARENT FOX PLLC

1050 Connecticut Avenue, N.W.
Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 857-6385

MO:elp